Morning Session #1: Costs of Housing for Lower Income Families

Corky Poster, Architect/Planner
Senior Fellow, Drachman Institute

Arizona Department of Housing Workshop
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"***Housing Elements of General and Other Jurisdictional Plans: Developing Policy for Sustainable Affordable Housing***"

Summary:

In order for jurisdictions to plan a creative and effective strategy for affordable housing, we must understand the "whole" cost of housing.

Summary:

This "whole" cost includes components not normally considered housing costs: transportation and community costs of energy and water.

1. In the traditional approach, we calculated the gap between construction cost and ability to pay and subsidized the difference for qualifying families.

2. Adding more complexity in our approach, we are understanding that there are many elements of housing cost beside the cost of construction and these may give us a better opportunity to close the affordability gap.

Construction *plus*

- ***Land development***
- ***Real estate***
- ***Banking***
- ***Ownership***

3. As we plan for the future, we will need to incorporate the "whole" cost of housing into our community planning, including:

- transportation re: services/employment
- energy/water and infrastructure

So let’s look at some facts.

1. Traditional approach,

Construction cost

Minimum Construction Cost
(1170 sf, 3 bedroom)

Site work	$ 3,522	4.1%
Foundation/floors	$ 7,834	9.2%
Exterior walls	$10,684	14.2%
Interior framing	$ 8,463	9.9%
Roof framing & roofing	$ 6,867	8.1%
Cabinets and casework	$ 2,727	3.2%
Finishes	$11,799	14.1%
Insulation and sealants	$ 2,225	2.6%
Doors/windows/hardware	$ 6,770	8.0%
Specialties/equipment	$ 2,514	2.9%
Mechanical	$ 8,344	9.9%
Plumbing	$ 6,826	8.1%
Electrical	$ 4,876	5.7%
Subtotal Construction	$83,451	100.0%

(The calculation for each sub-contractors includes sub-contractor profit and overhead.
Approximately 88% of the costs above are material and labor, 12% are profit and overhead)

Minimum Construction Cost
(1170 sf, 3 bedroom) (continued)

• Subtotal Construction	$ 83,451	78.7%
• General Conditions	$ 7,531	7.1%
• Overhead @ 5%	$ 4,549	4.3%
• Profit @ 6%	$ 5,732	5.4%
• Tax @ 4.74%	$ 4,799	4.5%
Grand-total Construction	$106,062	
Lot Development Cost	$ 25,877	
Sales price:	$131,939	

Standard Procedure:

Benchmark affordability is defined as:

$$\frac{\text{(Rent / mortgage + Utilities)}}{\text{Gross Income}} < 30\%$$

Our sales price = $132,000

90% Mortgage (30 yr @ 7.25%)	= $	812
Utility/taxes/insurance	= $	352
Monthly cost to owner	= $	1,164
at 30% rule, income can be	=	$46,560

Pima County $51,680 = +/- median income

80% median = $ 38,780

$38,780 x .3 / 12 mos. affords/mo.	= $	969
Utility/taxes/insurance	= $	352
Available to pay Mortgage	= $	617
Mortgage (90% for 30 yr @ 7.25%)	= $	90,500
Sales price must be /.9	=	$100,555
Minimum house	=	$132,000
Subsidy (or reduce cost)	$	31,444

So how do we reduce the cost of construction by almost $31,444?

We can't.

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Some surprising conclusions about housing cost

It is not a design problem; housing cost will not be significantly lowered by creative design.

It is not a labor problem; it cannot be solved by reducing the wages of the people that build housing nor solved by sweat equity.

It is not a technology problem; it will not be solved in the near future by new materials or products.

It is not a quality problem. It cannot be solved by developing products less durable or safe. Bad housing should not be the alternative to homelessness.

Solving the housing problem will be a combination of putting more resources into the hands of housing consumers (higher wages and/or more subsidy) and by systematically attacking housing cost at its *most vulnerable points*

To attack housing costs at its most vulnerable points, one needs to understand with a great degree of sophistication, all of the aspects of housing cost

2. More comprehensive approach,

Construction *plus*

- ***Land development***
- ***Real estate***
- ***Banking***
- ***Ownership***

Minimum Housing Costs (a very low end example)

- Construction
- Land development
- Real estate
- Banking
- Ownership

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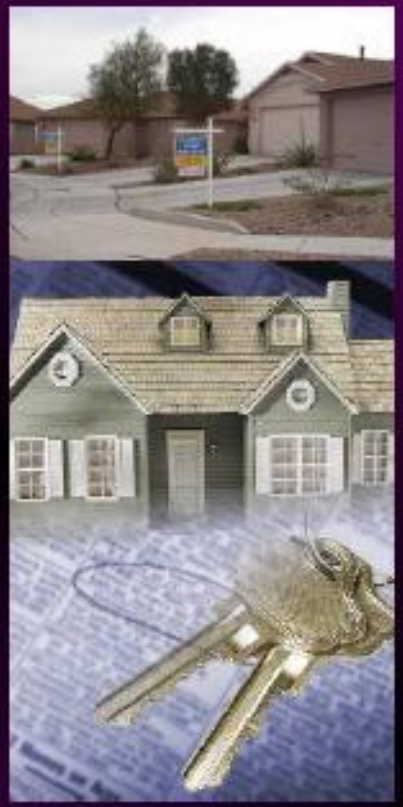
Land Development Costs (50 lot subdivision)

• Raw land purchase cost	$13,200/lot
• Rezoning cost	$ 1,856/lot
• Construction/engineering	$ 9,421/lot
• Permits and review	$ 1,400/lot
Total	$25,877/lot

Real Estate ($132,000 home)

- **Closing Costs**

Loan origination fee	$ 875
Appraisal fee	$ 325
Credit report	$ 65
Tax service fee	$ 85
Underwriting fee	$ 325
Closing fee	$ 205
Documentation fee	$ 115
Title Insurance	$ 255
Recording fee	$ 25
Flood certification	$ 9
Total	$2284



Real Estate ($132,000 home)

- **Prepaid Escrow**

Interim interest	$ 190
Hazard insurance	$ 425
Property tax impounds	$ 345
Total	$ 960

- **Total closing/escrow** $3244

(When used,
Real Estate Commission @ 6% $7920)

Banking ($118,800 mortgage, 30 year)

Interest Rate	Monthly Payment	Total Paid	Factor
• 0.0%	$ 330.	$118,800	1.00
• 1.0%	$ 382.	$137,520	1.16
• 2.0%	$ 439.	$158,040	1.33
• 3.0%	$ 501.	$180,360	1.52
• 4.0%	$ 567.	$204,120	1.72
• 5.0%	$ 637.	$229,320	1.93
• 6.0%	$ 712.	$256,320	2.15
• 7.0%	$ 790.	$284,400	2.39
• 8.0%	$ 871.	$313,560	2.64
• 9.0%	$ 956.	$344,160	2.90
• 10.0%	$1042.	$375,120	3.16

Banking ($118,800 mortgage, 20 year)

Interest Rate	Monthly Payment	Total Paid	Factor
• 0.0%	$ 495.	$118,800	1.00
• 1.0%	$ 546.	$131,040	1.10
• 2.0%	$ 601.	$144,240	1.21
• 3.0%	$ 658.	$157,920	1.33
• 4.0%	$ 720.	$172,800	1.45
• 5.0%	$ 784.	$188,160	1.59
• 6.0%	$ 851.	$204,240	1.73
• 7.0%	$ 921.	$221,040	1.87
• 8.0%	$ 993.	$238,320	2.01
• 9.0%	$1069.	$256,560	2.16
• 10.0%	$1146.	$275,040	2.32

Ownership ($132,000 house/month)

• Gas	$ 45
• Electric	$ 85
• Telephone (land line, no cell)	$ 52
• No cable, no internet	$ 0
• Water	$ 44
• Insurance	$ 48
• Taxes	$ 98
• Replacement reserve	$100
• Repairs and maintenance	$ 80
Total Monthly Ownership Cost	$552

Conclusions

1. The monthly payment of a housing consumer is going a lot of other places beside the actual cost of labor and materials.

Conclusions

2. For the consumer, the cost of housing is based on the total monthly dollars expended for shelter.

Conclusions

3. For the consumer, each dollar is equal no matter what it pays for. A dollar of insurance equals a dollar of utility equals a dollar of interest equals a dollar of repair equals a dollar of tax, etc.

Conclusions

4. To be effective in reducing actual housing cost, we must think of the obstacles as including all of these costs.

Conclusions

5. Our choice of obstacles to attack should be strategic. If all dollars are equal, we should go after the ones that are technically or politically the easiest. Pick the low fruit.

Lets go back to our example:

(sales price = $132,000)

Mortgage (30 year at 7.25%) = $ 812

Ownership costs = $ 552

Monthly cost to owner = $ 1364

30% rule (OK here near AMI)

Family Income must = $54,560

Suppose we had an affordability problem

Family Income is only = $50,560

Cost/mo. can only be = $ 1,264

Compared to previous = $ 1,364

Reduce monthly cost by $ 100

What are the different ways we might achieve that?

1. Reduce land and land development cost $16,300

a. Provide free land ready to build

What are the different ways we might achieve that?

2. Reduce construction cost by $16,300 (hard construction cost by $12,825)

a. Eliminate the HVAC & electrical, OR

b. Eliminate interior walls and electrical. OR

c. Eliminate exterior walls, OR

d. Eliminate all finishes, OR

c. Eliminate general conditions, overhead, profit, tax, OR

d. Reduce the hourly labor rate by 40%, OR

e. Invest 1280 hours of sweat equity

What are the different ways we might achieve that?

3. Reduce mortgage interest rate by 1.35%
4. Lower utility cost (e,g,w,t) by 59%
5. Don't set aside replacement reserve
6. Eliminate property tax
7. No maintenance and repairs
8. No telephone or insurance
9. Provide $16,300 subsidy from other funds.

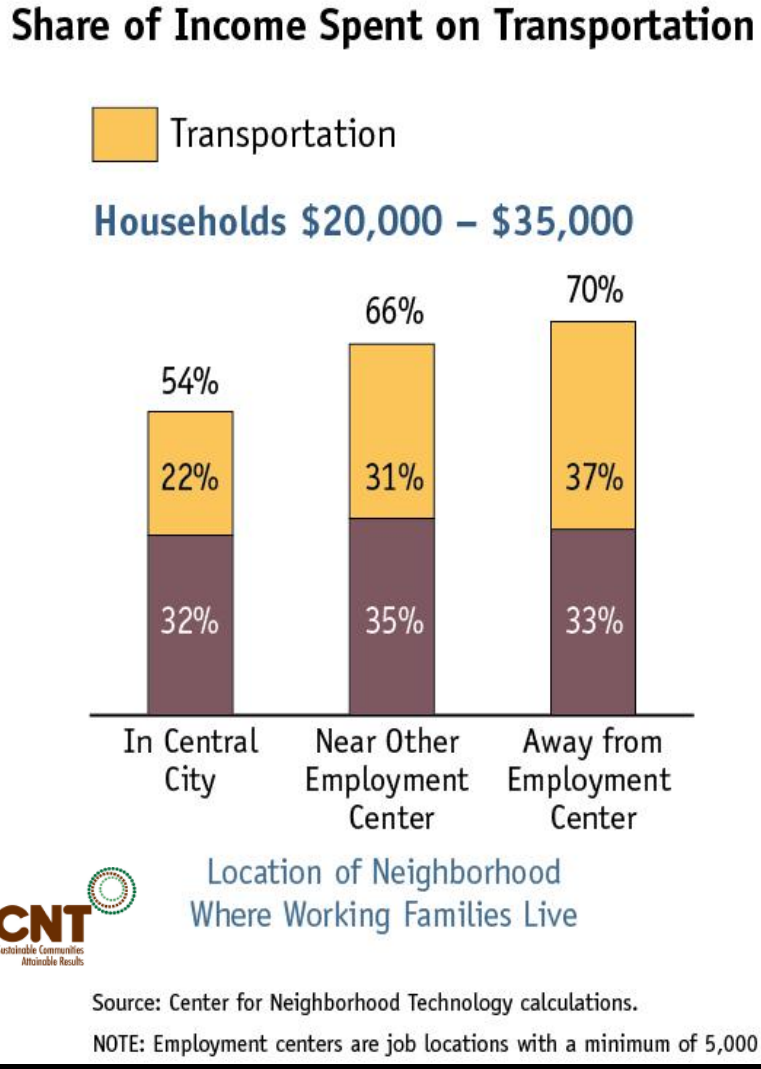
3. So now look at the “whole” cost of housing that includes:

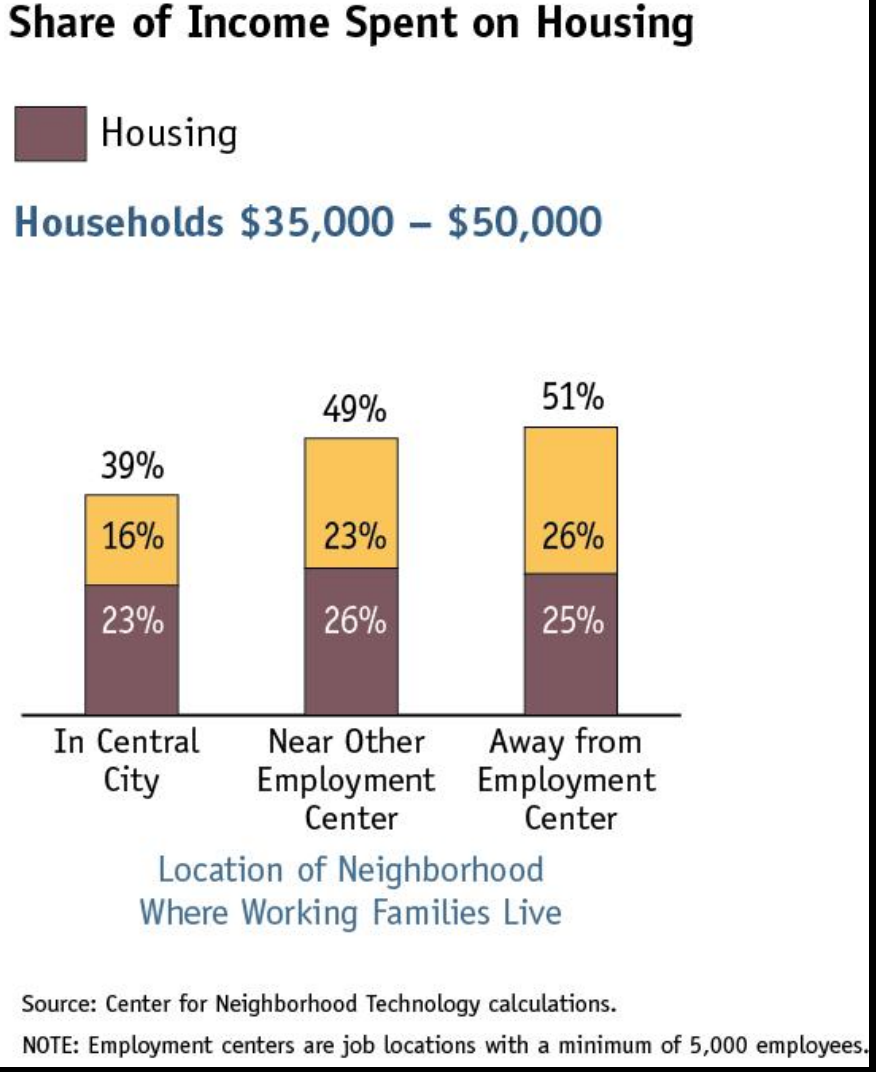
- transportation re: services/employment
- energy/water and infrastructure

- **The transportation cost of housing in relation to services & employment**

- **All housing has to be located somewhere.**
- **Where housing is located has a real impact on transportation costs.**
- **So while transportation is not an actual cost of housing, there is a relationship between the two.**

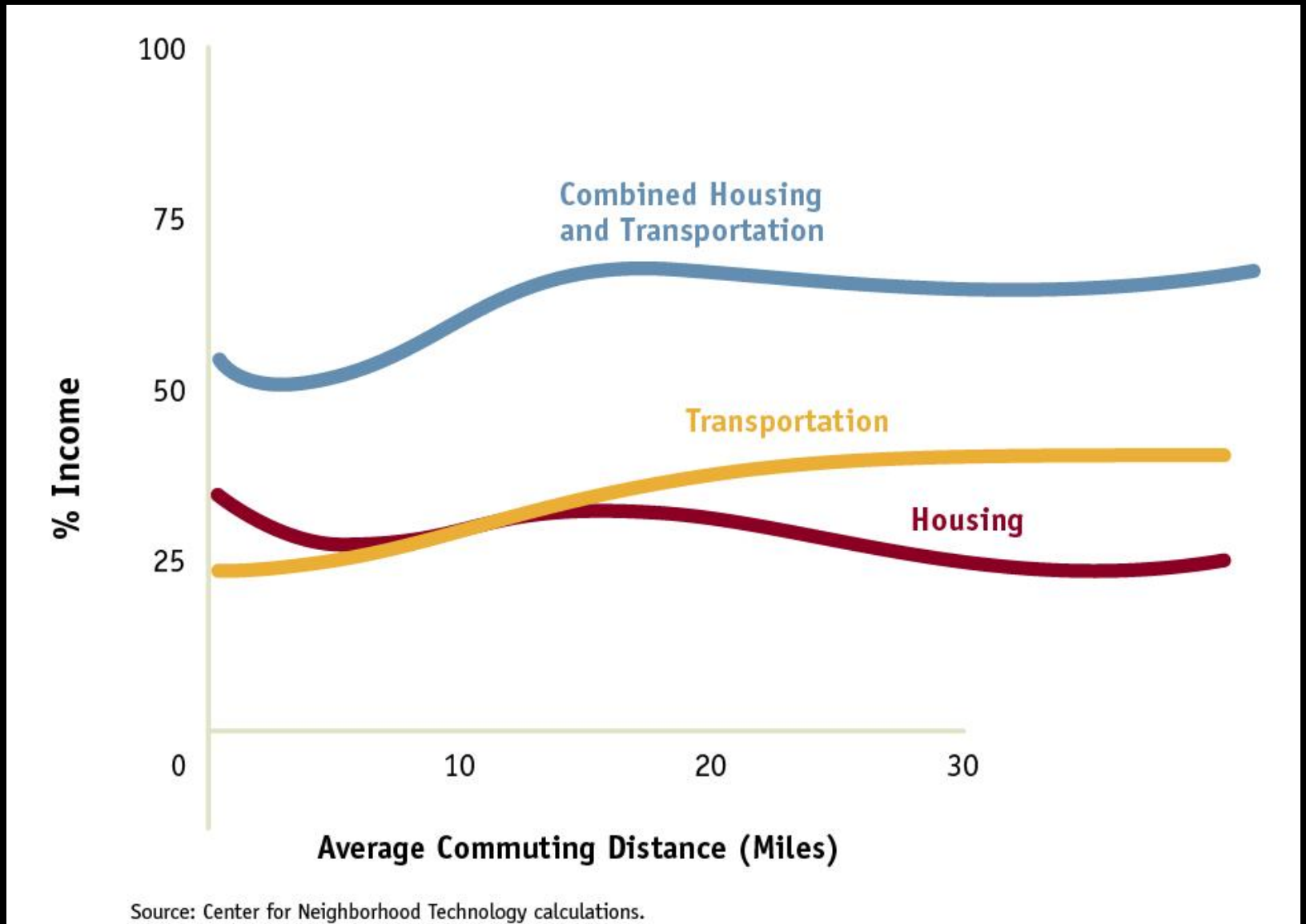
For working families across the nation, transportation varies by location and sometimes exceeds housing costs!





So what does this mean?

“Drive ‘til You Qualify”: Transportation costs exceeding housing costs for households earning $20-$50,000



Source: Center for Neighborhood Technology calculations.

The Center for Neighborhood Technology in partnership with the Brookings Institution proposes a:

Housing + Transportation Affordability Index

that takes into account the transportation costs associated with a particular housing choice.

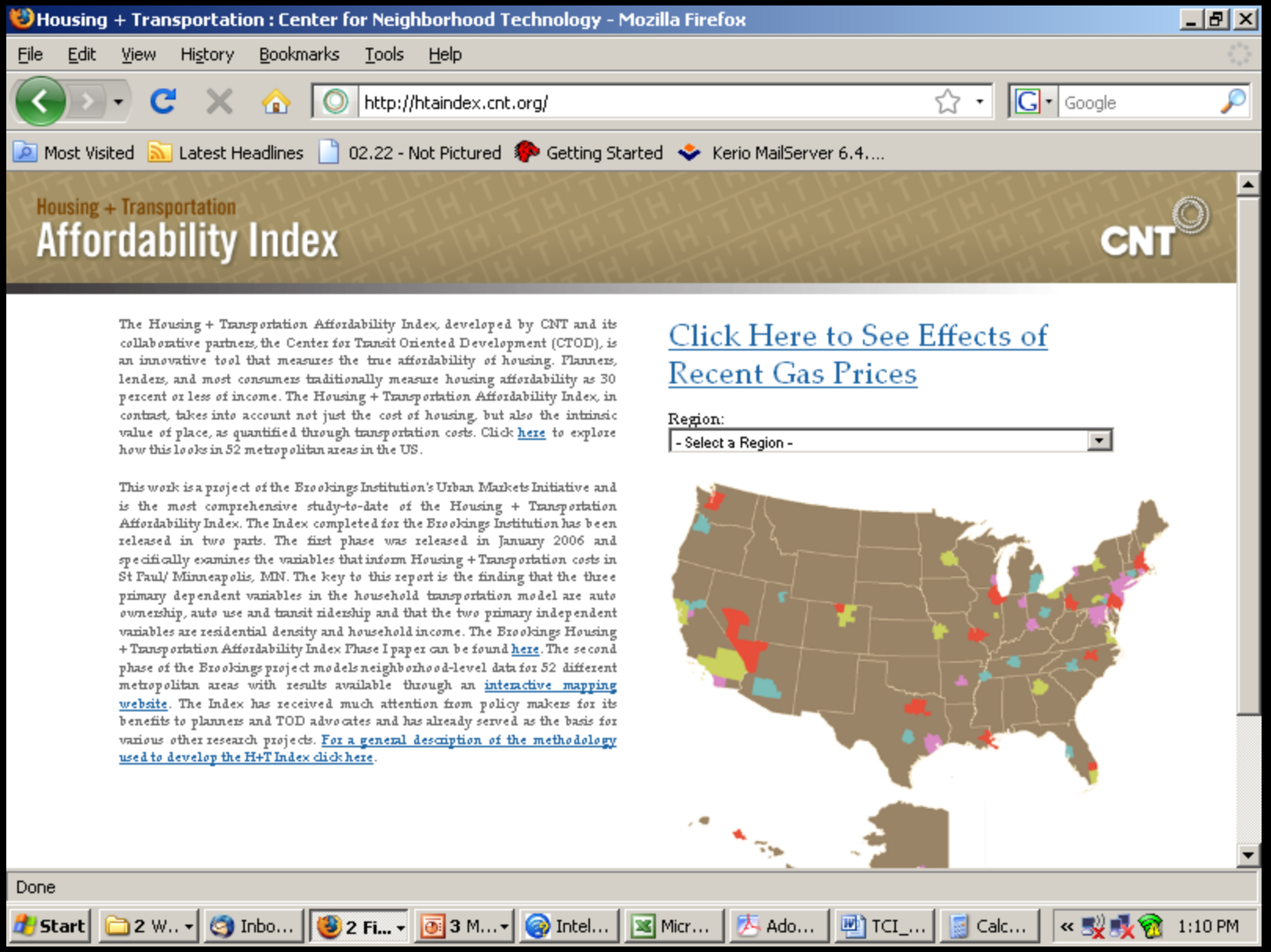
What is the Housing + Transportation Affordability Index?

A tool to measure the 2 largest household costs – *housing and transportation* – by neighborhood.

H+T Affordability Index Equation
$\text{H+T Index} = \frac{\text{(Housing Costs + Transportation Costs)}}{\text{Gross Income}}$

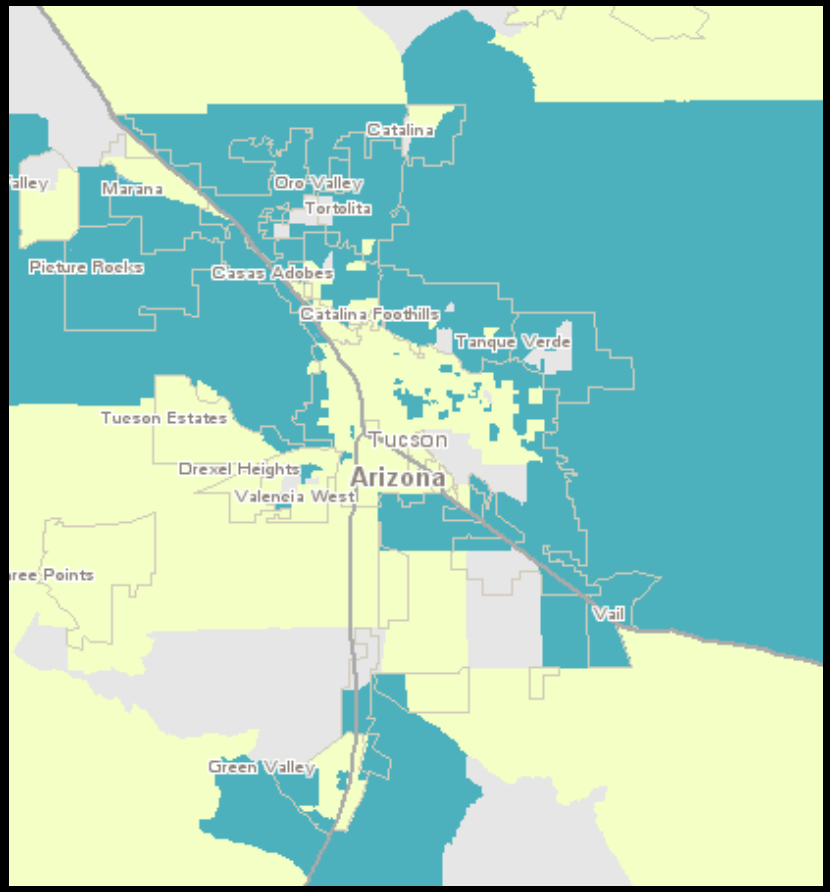
The Center for Neighborhood Technology recommends a H+ T Index < 45% – 48%

http://htaindex.cnt.org

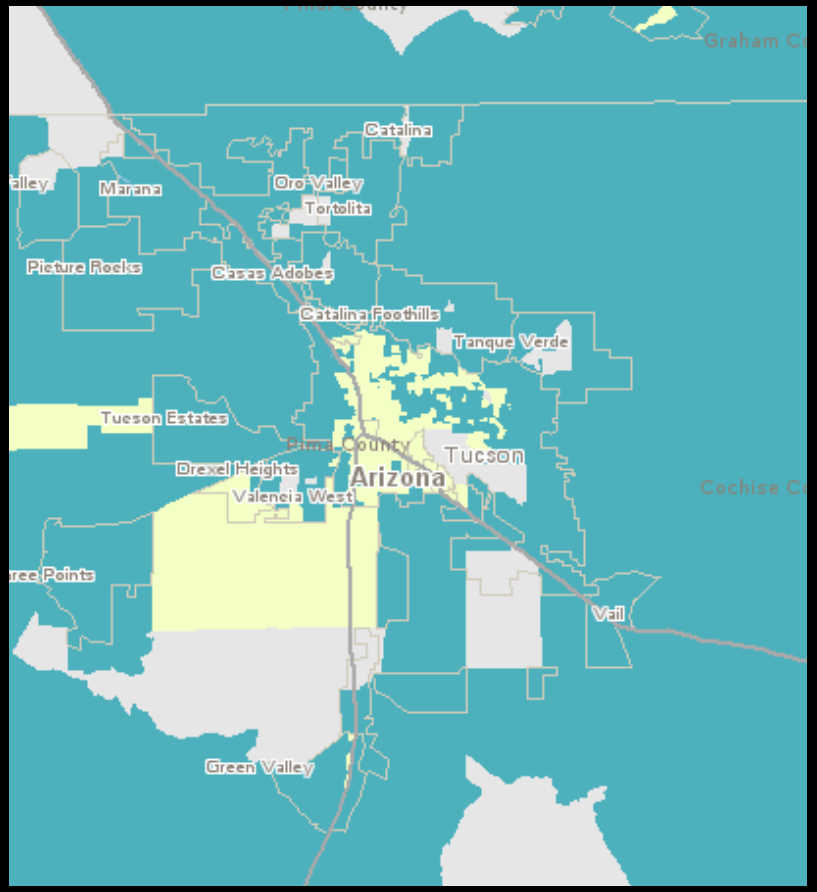


Tucson MSA
Housing Affordability at 30% vs. H + T at 45%

H-Only at 30%

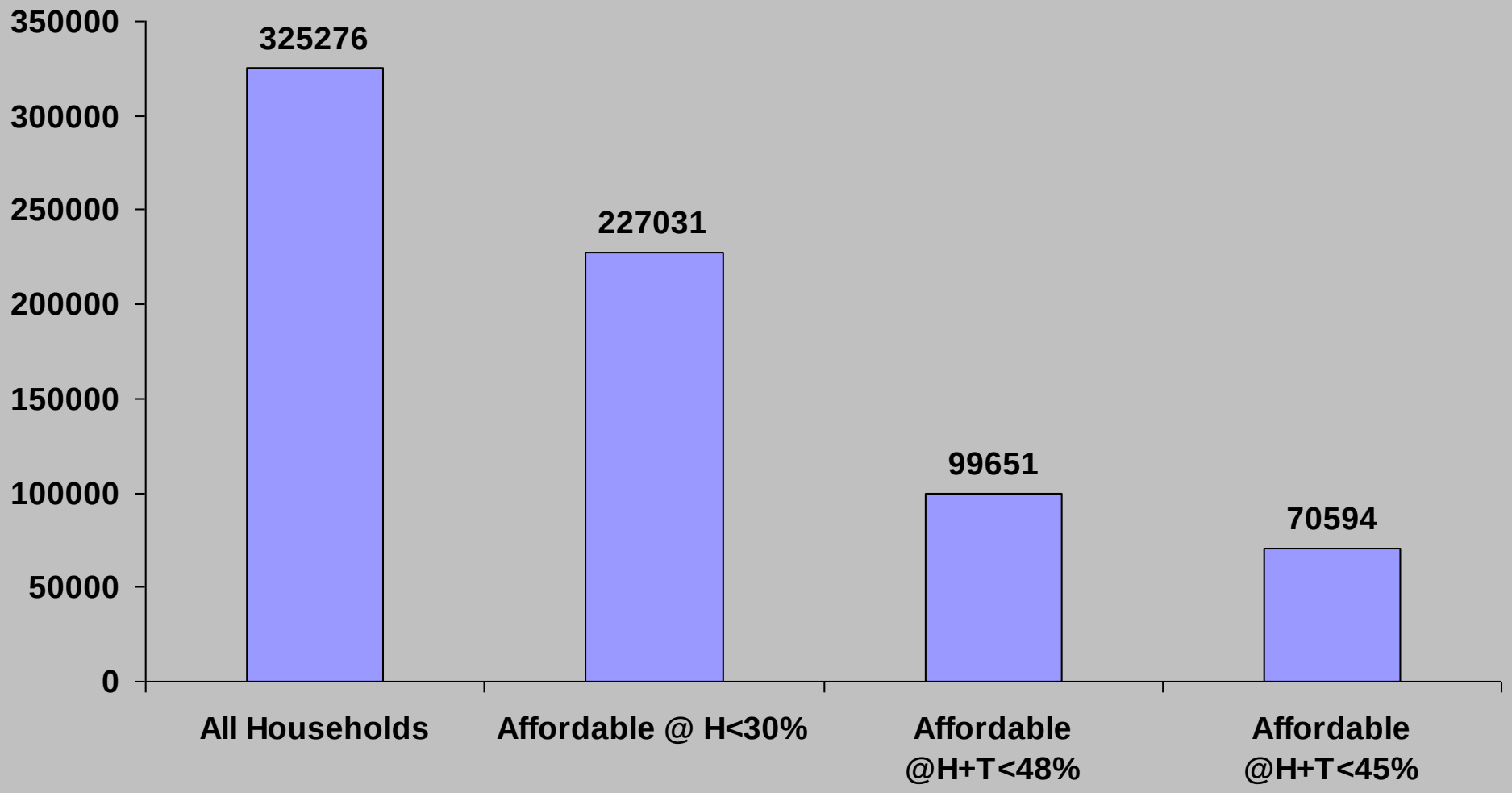


H+T at 45%



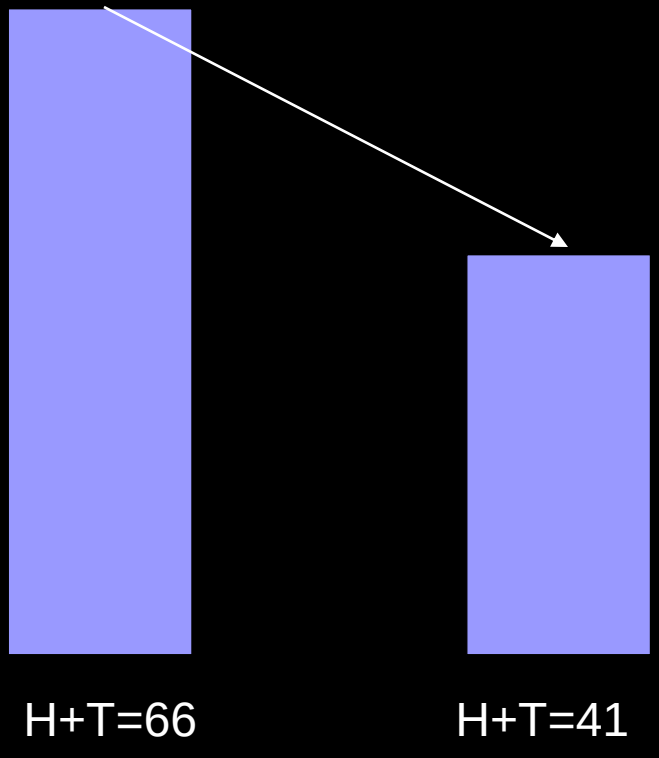
Tucson MSA

Loss of Affordability including Transportation Costs



What it's worth?

- Tucson households (2 cars) spend **$15,200** on transportation
  $14,850 on housing
  $30,050, 2/3 of income (H+T = 66%)
- Household with 1 car, 15,000 miles/yr spends $8,300 on transportation, saving $6,900 or 15% of income
- Reduces H+T to 41%
- Increases disposable income 15%
- Region of 500,000 households saves $3.3 billion per year



LET ME REPEAT!

On average a median income family that owns two cars and drives 25,000 miles per year pays as much for transportation as it does for housing!

Don't believe it?

- Tucson households (2 cars) spend **$15,200** on transportation
  $14,850 on housing
  $30,050, 2/3 of income (H+T = 66%)

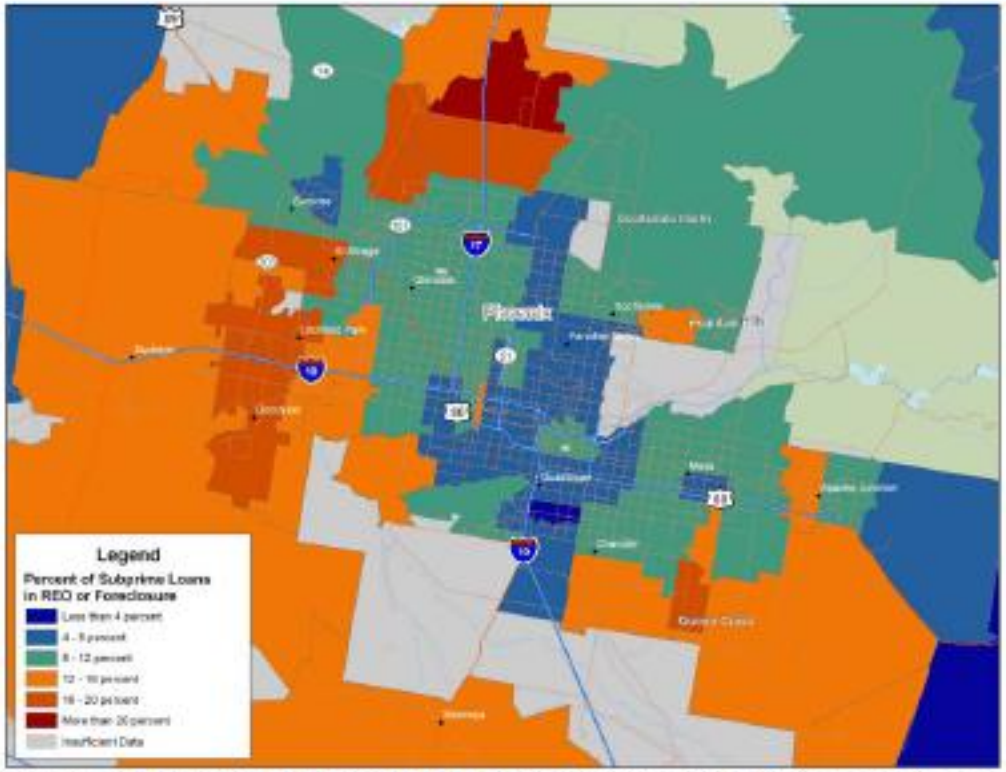
Let's check it using a different calculation?

IRS.gov

- **A household with 2 cars, 25,000 miles/yr calculated at the federal mileage reimbursement rate of $0.55/mi = $13,750**

Implications for affordability

Foreclosures Concentrated in Suburban Fringe



Source: Analysis by Federal Reserve Board of Governors, First American LoanPerformance Data, December 2007. Data represent a sample of subprime loans, approximating 70 percent of subprime loan volume. Data aggregated at the zip code level.

Policy Implications

1. The data show that Arizona's affordable housing problem is in large part a location, land use, and transportation problem.

Policy Implications

2. Affordable housing policy should consider the location of that housing in relation to jobs, services, and transportation.

Policy Implications

3. Affordable housing policy needs to be coordinated with our transportation and energy/water policy and vice versa.

Policy Implications

4. Investments in alternate modes can have a positive effect on housing affordability.

Policy Implications

5. The 2008 Arizona Town Hall recommended a H+T Index be adopted by Arizona's communities.

Can we afford the investment in transit?

- A region with 500 thousand Households is spending $15,000 each for household on transportation
- That is $7.5 Billion per year
- Over the next 30 years our region will likely spend over on $500 Billion on private automobile transport

In the 2008 primary, Dennis Kucinich was asked how we can pay for universal healthcare. His answer was *"We are already paying for it, we are just not getting it."*

Now let's look briefly at energy and water costs.

IF YOU RECALL

What are the different ways we might achieve a $100 reduction in monthly payment?

2. Reduce construction cost by $16,300 (hard construction cost by $12,825)

a. Eliminate the HVAC & electrical, OR

b. Eliminate interior walls and electrical. OR

c. Eliminate exterior walls, OR

d. Eliminate all finishes, OR

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Ownership ($132,000 house/month)

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• Water	$ 44
• Insurance	$ 48
• Taxes	$ 98
• Replacement reserve	$100
• Repairs and maintenance	$ 80
Total Monthly Ownership Cost	$552

Gas (Heat, cooking a hot water) =	$ 45.00
Electric (Power and A/C) =	$ 85.00
Water (potable and irrigation) =	$ 44.00
Total	$174.00

Achieving a 60% reduction in the monthly expenditure on energy and water is a much easier task than a $16,000 reduction in construction cost